

AMENDMENTS TO THE CLAIMS

1-6. (Cancelled)

7. (Withdrawn) A portable IC card, comprising:

a storage unit operable to store first reservation information, the first reservation information indicating a reservation for purchase of a ticket for a transport and including a boarding location where the transport is to be boarded and a departure time of the transport;

an obtaining unit operable to obtain an expected arrival time of a user at the boarding location;

a margin judgment unit operable to judge whether or not a time margin between the obtained expected arrival time and the departure time included in the first reservation information is sufficient; and

a changing unit operable to, when the time margin is judged not to be sufficient, store second reservation information in place of the first reservation information, the second reservation information indicating a reservation for a ticket for a transport that departs later than the departure time.

8. (Withdrawn) The IC card of Claim 7, wherein

the margin judgment unit determines that the time margin is insufficient when a margin-added expected arrival time is later than the departure time, the margin-added arrival time having been obtained by adding a margin value to the expected arrival time.

9. (Withdrawn) The IC card of Claim 8, wherein

the IC card is mounted in a mobile terminal apparatus, the mobile terminal apparatus being connected to an information provision server apparatus and a reservation server apparatus via a network,

the obtaining unit instructs the mobile terminal apparatus to obtain a present location of the mobile terminal apparatus,

the mobile terminal apparatus obtains the present location, extracts the boarding location from the first reservation information stored in the mounted IC card, and transmits the obtained

present location and the extracted boarding location to the information provision server apparatus,

the information provision server apparatus receives the present location and the boarding location, calculates the expected arrival time at the boarding location or an approximate time for the user to arrive at the boarding location, with use of the received present location and boarding location, and transmits the calculated expected arrival time or approximate time to the mobile terminal apparatus,

the mobile terminal apparatus receives the expected arrival time, or receives the approximate time and calculates an expected arrival time, and outputs the received expected arrival time to the IC card,

the obtaining unit receives the expected arrival time, and

the changing unit overwrites the stored first reservation information with the second reservation information, and further transmits the second reservation information to the reservation server apparatus via the mobile terminal apparatus.

10. (Withdrawn) The IC card of Claim 9, further comprising:

a present information obtaining unit operable to obtain a time difference between the departure time and a present time, and obtain a distance between the obtained present location and the boarding location; and

a difference judgment unit operable to judge, according to the obtained time difference and the obtained distance, whether or not the margin judgment unit is to perform judgment, wherein when the difference judgment unit judges that the margin judgment unit is not to perform the judgment, the margin judgment unit suppresses judgment, and the changing unit suppresses overwriting.

11. (Withdrawn) The IC card of Claim 8, further comprising:

a boarding procedure unit operable to perform, with an external apparatus, a procedure for boarding transport, with use of the stored second reservation information.

12. (Withdrawn) The IC card of Claim 11, wherein

the external apparatus is a ticket issuing apparatus that issues tickets for transport,

the boarding procedure unit outputs the stored second reservation information to the ticket issuing apparatus, and

the ticket issuing apparatus receives the second reservation information, and issues a ticket for the transport for which a reservation has been made according to the received second reservation information.

13. (Withdrawn) The IC card of Claim 11, wherein

the external apparatus is a ticket inspection apparatus that inspects tickets at an entry point for boarding a transport,

the boarding procedure unit outputs the stored second information to the ticket inspection apparatus, and

the ticket inspection apparatus receives the second reservation information, inspects content of the received second reservation information, and controls opening and closing of a gate of the ticket inspection apparatus according to a result of the inspection.

14. (Withdrawn) A mobile terminal apparatus for changing a reservation for purchase of a ticket for a transport that provides a transportation service, comprising a secure unit, the secure unit including:

a storage unit operable to store first reservation information, the first reservation information indicating the reservation and including a boarding location where the transport is to be boarded and a departure time of the transport;

an obtaining unit operable to obtain a present location of the mobile terminal apparatus, extract the boarding location from the first reservation information, and obtain an expected arrival time of a user at the boarding location, with use of the obtained present location and the extracted boarding location;

a margin judgment unit operable to judge whether or not a time margin between the obtained expected arrival time and the departure time included in the first reservation information is sufficient; and

a changing unit operable to, when the time margin is judged not to be sufficient, transmit second reservation information to the reservation server apparatus, the second reservation information indicating a reservation for a ticket for a transport that departs later than the

departure time, and store the second reservation information in place of the first reservation information.

15. (Withdrawn) The mobile terminal apparatus of Claim 14, wherein
the margin judgment unit determines that the time margin is insufficient when a margin-added expected arrival time is later than the departure time, the margin-added arrival time having been obtained by adding a margin value to the expected arrival time.

16. (Withdrawn) The mobile terminal apparatus of Claim 15, wherein
the obtaining unit obtains the present location by calculating the present location based on range finding signals received from a plurality of GPS satellites.

17. (Withdrawn) The mobile terminal apparatus of Claim 15, wherein the secure unit is a portable IC card.

18. (Withdrawn) The mobile terminal apparatus of Claim 15, wherein
the secure unit further performs, with an external apparatus, a procedure for boarding transport, using the second reservation information.

19. (Withdrawn) The mobile terminal apparatus of Claim 18, wherein
the external apparatus is a ticket issuing apparatus that issues tickets for transport,
the secure unit of the mobile terminal apparatus outputs the stored second reservation information to the ticket issuing apparatus, and
the ticket issuing apparatus receives the second reservation information, and issues a ticket for the transport for which a reservation has been made according to the received second reservation information.

20. (Withdrawn) The mobile terminal of Claim 18, wherein
the external apparatus is a ticket inspection apparatus that inspects tickets at an entry point for boarding a transport,
the secure unit of the mobile telephone apparatus outputs the stored second information

to the ticket inspection apparatus, and

the ticket inspection apparatus receives the second reservation information, inspects content of the received second reservation information, and controls opening and closing of a gate of the ticket inspection apparatus according to a result of the inspection.

21. (Withdrawn) The mobile terminal apparatus of Claim 15, being connected to an information provider server via a network,

wherein the obtaining unit transmits the obtained present location and the extracted boarding location to the information provision server, receives the expected arrival time from the information provision server, or receives an approximate time for the user to arrive at the boarding location from the information provision server and calculates an expected arrival time at the boarding location.

22. (Withdrawn) A reservation changing method used in a reservation changing apparatus for changing a reservation for purchase of a ticket for a transport that provides a transportation service,

the reservation changing apparatus comprising a secure unit, the secure unit including:

a storage unit operable to store first reservation information, the first reservation information indicating the reservation and including a boarding location where the transport is to be boarded and a departure time of the transport;

an obtaining unit;

a margin judgment unit; and

a changing unit, and

the method comprising:

an obtaining step for the obtaining unit to obtain a present location of the mobile terminal apparatus, extract the boarding location from the first reservation information, and obtain an expected arrival time of a user at the boarding location, with use of the obtained present location and the extracted boarding location;

a margin judgment step for the margin judgment unit to judge whether a time margin between the obtained expected arrival time and the departure time included in the first reservation information is sufficient; and

a changing step for the changing unit, when the time margin is judged not to be sufficient, to transmit second reservation information to a reservation server apparatus, the second reservation information indicating a reservation for a ticket for another transport that departs later than the departure time, and store the second reservation information in place of the stored first reservation information.

23. (Withdrawn) A computer program for reservation changing used by a reservation changing apparatus for changing a reservation for purchase of a boarding ticket for a transport that provides a transportation service,

the reservation changing apparatus comprising a secure unit, the secure unit including:

a storage unit operable to store first reservation information, the first reservation information indicating the reservation and including a boarding location where the transport is to be boarded and a departure time of the transport;

an obtaining unit;

a margin judgment unit; and

a changing unit, and

the method comprising:

an obtaining step for the obtaining unit to obtain a present location of the mobile terminal apparatus, extract the boarding location from the first reservation information, and obtain an expected arrival time of a user at the boarding location, with use of the obtained present location and the extracted boarding location;

a margin judgment step for the margin judgment unit to judge whether a time margin between the obtained expected arrival time and the departure time included in the first reservation information is sufficient; and

a changing step for the changing unit, when the time margin is judged not to be sufficient, to transmit second reservation information to a reservation server apparatus, the second reservation information indicating a reservation for a ticket for another transport that departs later than the departure time, and store the second reservation information in place of the stored first reservation information.

24. (Withdrawn) The computer program of Claim 23, recorded on a computer-readable

recording medium.

25. (New) A portable IC card for managing reservation information pertaining to a reservation for a transport to be boarded at a transfer location, the IC card comprising:

a storage unit that stores therein an inter-boarding-location timetable indicating a time required for traveling from a nearest boarding location to a transfer location;

an obtaining unit operable to obtain an expected boarding arrival time of a user at the nearest boarding location;

a calculation unit operable to calculate an expected transfer arrival time of the user at the transfer location by (i) extracting, from the inter-boarding-location timetable, a time required to travel from the nearest boarding location to the transfer location and (ii) adding the expected boarding arrival time at the nearest boarding location to the time extracted from the inter-boarding-location timetable; and

a reservation management unit that stores therein the reservation information including an expected departure time of the transport from the transfer location, wherein

when the expected transfer arrival time at the transfer location is later than the expected departure time from the transfer location, in place of the reservation, a request is made for a new reservation for another transport that is to depart from the transfer location after the expected transfer arrival time.

26. (New) The IC card of Claim 25, wherein the obtaining unit includes:

an obtaining sub-unit operable to obtain a plurality of location information pieces each showing a different present location at intervals of a predetermined time;

a speed calculation sub-unit operable to calculate a movement speed of the user based on the predetermined time and the location information pieces; and

a time calculation sub-unit operable to calculate an arrival time at the nearest boarding location of the user who is moving at the calculated movement speed.

27. (New) The IC card of Claim 25, further comprising:

a location obtaining unit operable to obtain a plurality of location information pieces each showing a different present location at intervals of a predetermined time;

a change judgment unit operable to judge whether an obtained location information piece has changed;

a time judgment unit operable, when the change judgment unit judges that the obtained location information piece has not changed, to judge whether the expected departure time from the transfer location is earlier than a time point obtained by adding a predetermined offset time to the expected arrival time at the transfer location; and

an output unit operable, when the time judgment unit judges that the expected departure time is earlier than the time point, to output a message for checking whether to change the reservation or not to the user.

28. (New) The IC card of Claim 27, further comprising:

a reception unit operable to receive an instruction to change the reservation pertaining to the reservation information in response to the output of the message; and

a reservation change unit operable, when the instruction is received, to make a new reservation for a transport whose expected departure time is later than the obtained time point in place of the reservation.

29. (New) The IC card of Claim 27, wherein as a change in a location information piece is smaller, the time judgment unit uses a larger offset time as the predetermined offset time.

30. (New) The IC card of Claim 25, wherein

the storage unit retains therein location information pieces each showing a different boarding location, and

the obtaining unit retains therein movement speed information showing a walking speed of a holder of the IC card, obtains a present location of the IC card, and calculates an expected arrival time of the holder at the nearest boarding location using the nearest boarding location, the present location, and the walking speed.